

PTkai: 03: Intro: What is Designing and developing digital outcomes?

Video Name: Introduction to Designing and Developing Digital Outcomes

Presenter: Hayley van Waas

So what is Designing and developing digital outcomes? Digital outcomes, combined with Computational thinking, makes up the Digital Technologies part of the revised Technology learning area. At the most simplistic level a digital outcome is something that can be stored or manipulated in a digital format - for example as a file.

There are so many ways of producing digital outcomes. Here are a few examples; perhaps some of these may be familiar to you:

- Office applications such as spreadsheets, powerpoint and word processing
- Digital video and sound recordings
- Electronics devices

Digital outcomes can be created using computer programs. An example of a digital outcome is a computer program running on a BBC Micro-bit. Any outcome supported by the area of Computational thinking that is digital is also relevant here.

3D printing is a kind of “additive” manufacturing where a digital outcome as a file is processed into a material outcome where only the material for the product is used, without waste.

Other examples that you may use everyday are web sites, digital publishing, digital photography, or podcasts. If the output, or the thing being made, can be captured in a digital file, so it can be stored on a computer of some sort, it is a digital outcome.

It's important to remember that this area is about designing and developing digital outcomes. In short, this means that as learners progress through the curriculum they will be moving from being users and consumers of digital technologies to innovative creators of digital solutions.

Now that we have introduced what designing and developing digital outcomes are, let's explore why it is important that our learners should become digital creators. Here are four key reasons:

Firstly, it is essential that our digital creators represent the diversity of our society. We need our digital creators to understand their audience and how they will engage with their tools. Imagine an app being built that doesn't work for left handers?

Students need to be digitally fluent in order to become innovative digital creators. Digital fluency is the ability to choose the appropriate digital tool to achieve the desired outcome. It's only after using a wide range of digital tools that students then become innovative digital creators.

Digital outcomes is a great way for our learners to express their creativity and individuality. So whether it's composing a song and setting it to a video in The Arts, or making a chart in Maths, 3D printing a prototype in Technology, or making a website in English, these are all digital outcomes.

Career pathways - If you entered the workforce more than 20 years ago, you wouldn't have considered the following occupations because they weren't around: user experience designer, social media manager, 3D animator, mobile phone app developer. So while we can't predict exactly what job opportunities there will be in the future, it seems certain that the ability to be a confident creator using digital tools will be an in demand skill. This means that for our learners to have a wide choice in their future employment they need to be digitally fluent.